



# Grass Growers challenge



The local football team have had a brilliant year and have won 'The Best Team Ever' cup. So much goal scoring has ruined the grass pitch and it needs to be replanted ready for next season.

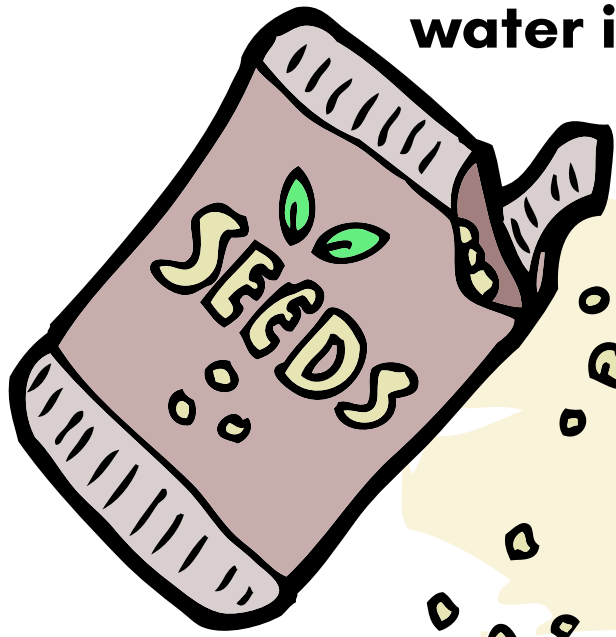
Mr Gardener has planted the grass seed, but birds keep eating it. He tried using a scarecrow but that didn't work. He then tried covering the seed with a blanket, which kept the birds away, but the seed didn't grow.

Can you help him?



## .....Your challenge

**Find a suitable seed covering that will keep the birds out and let enough light and water in.**



### Things to think about

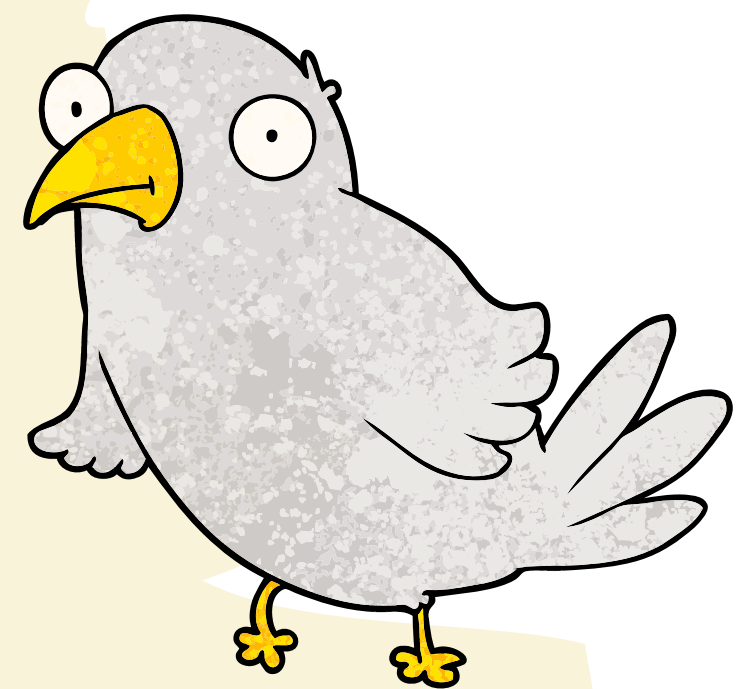
How much water should be let in?

Will the seed need a lot of light?

Will you need to modify any of the materials?

What can you do to make sure the experiment is fair?

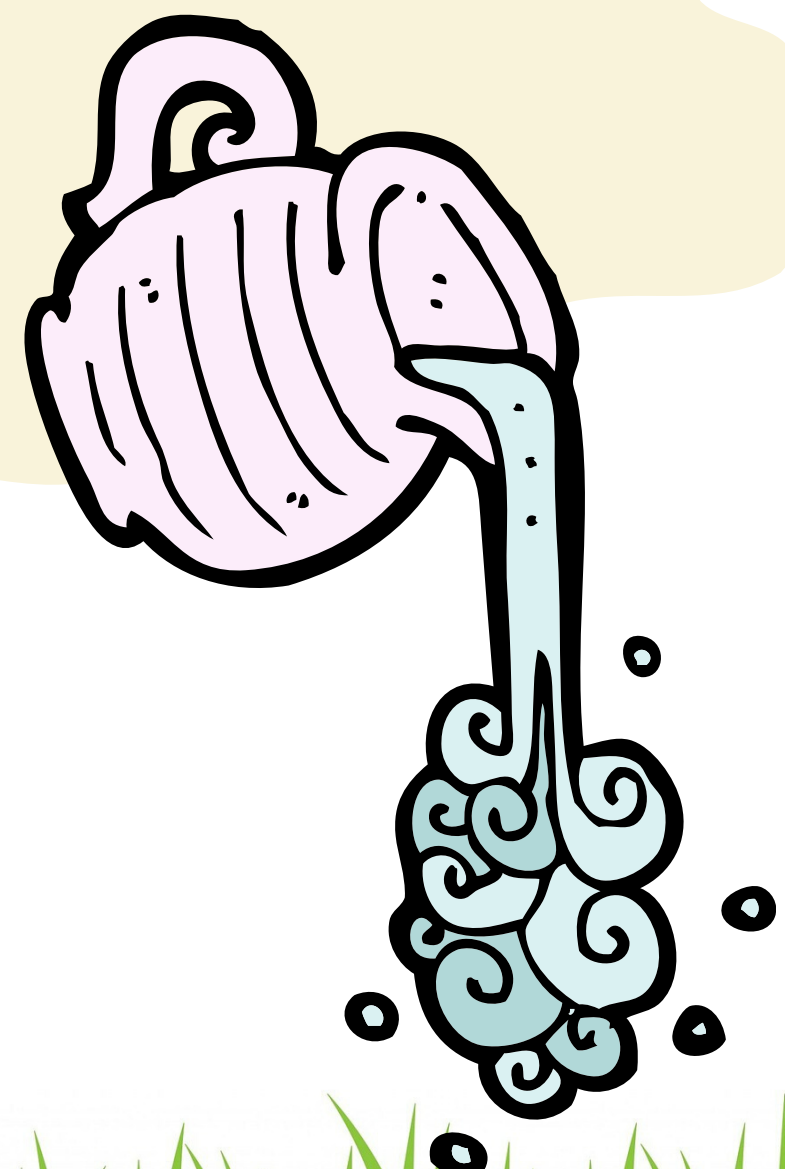
**What type of covering do you think will work best?**



## .....Investigate!

Look at the different materials and choose four that you will test out as seed coverings.

How are you going to test them?



# Grass Growers challenge

Your results .....

## Which covering worked best?

You could record your results in a chart like the one below or you might like to take photos or draw pictures.

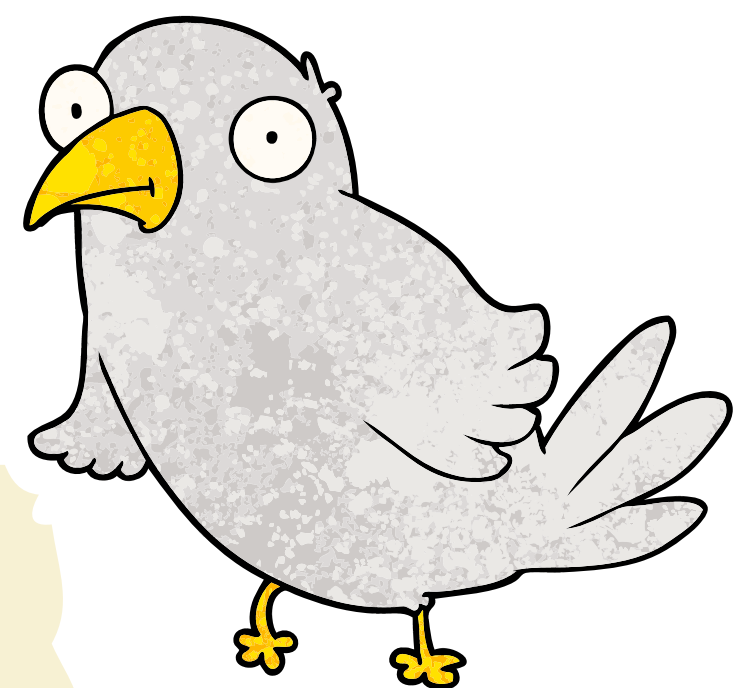
| Material | Let light in | Let water in | Kept birds out |
|----------|--------------|--------------|----------------|
|          |              |              |                |
|          |              |              |                |
|          |              |              |                |
|          |              |              |                |
|          |              |              |                |

## Share your ideas .....

Present the most suitable covering to the rest of your group and tell them why you think it is the best.

Explain how you made sure that your investigation was fair.

Did other investigators get the same results as you?



## Discuss .....

If you were to do this activity again what would you do differently?

How could you make your investigation better?







# Grass Growers

## Facilitators notes

### About the activity .....

This activity will enable children to learn about the conditions seeds need to grow. In addition they will consider the benefits and disadvantages of using different materials, think about weight and measurements along with having the opportunity to practice making predictions, recording results and presenting their findings to others.

### Materials and equipment needed .....

**Seeds-** You can use grass seed but it is not necessary and sesame seeds make a great inexpensive alternative.

**Containers-** Paper or plastic cups that can be washed out and used again are ideal alternatively, any containers that are all identical can be used. You will need four per experiment.

**Soil-** You will need enough to half fill the containers.

**Covering materials-** A variety of materials that can be used to cover the seeds. Examples are paper, plastic bags, tinfoil, fabric, clingfilm, net, card. It is important that there is a choice of more than four available.

**Sticky tape or elastic bands**

**measuring jug**

**weighing scales**

**Water**

**Scissors**

**Spoons**

**Pecking birds-** this is optional but, it adds a fun element to the activity and makes it more memorable. A template is included at the end of these notes.

### Advance preparations .....

Make the pecking birds if using them.

Gather the materials together so that they can be easily distributed when needed.

### What to do .....

Start by reading the introductory story to the children.

Ask if any of them have grown grass seed or any other seeds. What did they grow? How did they do it?

Ask if anyone has an idea of what Mr Gardener could do.

Read out the challenge and tell them that they are going to do an experiment to find out what type of covering will work best.

Give out the worksheets and equipment to the children.

Encourage the children to talk about how they are going to conduct their experiment and how they will make sure it is fair. Get them to consider how they will record their results.

Support the children to conduct their experiments, allowing them to learn from their errors and make changes as necessary. Remind them of the importance of keeping a record of their results and encourage them to record their results in their own way.

Encourage the children to present their results to the rest of the group. Prompt them to talk about their predictions and what went well and not so well during their experiment.

Discuss with the children what they would do differently if they were to do the activity again and how they could make their experiment better if they were to repeat it.

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### Pecking birds template .....

Print the birds onto card. If you will be using them again it is recommended that you laminate them. Cut the birds out and attach a lolly stick to the back of each, so that they can be used as puppets.

